



OFFICE OF RESEARCH AND DEVELOPMENT SUPERFUND AND TECHNOLOGY LIAISON (STL) REGION 9 NEWSLETTER

Fall 2008, Edition 45

Here we are and it's Fall again....time for the World Series (will the Phillies show the Rays how to play ball or vice versa?) as well as election time (the candidates aren't the only ones talking about wanting change!). What's that all got to do with hazardous waste site cleanup? Well, nothing really. I'm just looking for an intro! Well, how about

This edition of the STL Newsletter offers no predictions about ballgames, your updated retirement date or upcoming elections, but it does provide you with the latest in environmental cleanup information and upcoming related workshops! Below, you can find articles on carbon sequestration, green remediation resources and case studies, as well as other sustainability issues. That certainly is a hot topic right now. This is a good time to remind you that you can also find waste cleanup tech support from the ORD Tech Support Centers. If your local experts are unavailable for some reason, please give me a call and I'll do my best to hook you up with the ORD experts that offer support in site characterization, subsurface issues, monitoring, engineering, aerial photos, and numerous other cleanup related disciplines. Call me or check out this webpage for more info on the individual services. Here it is: <http://intranet.epa.gov/ospintra/scienceportal/htm/techsupport.htm#hstl> .

One other important note: Until very recently, it was unclear whether EPIC (the Environmental Photographic and Interpretation Center) would be available next year due to budget cuts. Thanks to David Bartenfelder and Robin Richardson of OSRTI for their efforts in ensuring that this resource will receive \$353K in funding to continue their archiving efforts for '09! As is normal, regions still need to fund their individual photo work requests (I do that), but the archiving has been funded separately by HQ. So, at least for the coming year, EPIC is there!

Please read on for plenty of new information in this quarter's newsletter!

Mike Gill
EPA Region 9
ORD Superfund and Technology Liaison
415-972-3054

Fall 2008 Edition of the Region 9 STL Newsletter:

National News

- National Forum on Vapor Intrusion: Science, Technology and Policy, January 12-13, 3009
- Summary of International Environmental Nanotech Conference: Applications and Implications, Chicago, IL
- New Tools and Technologies
 - Sequestering Carbon Dioxide
 - Sustainable Approaches to Analyzing Chemical Toxicity
 - Ecotoools Technical Assistance Service

Local News

- Green Remediation Case Studies

Datebook - Upcoming Events

Web Pages

- EUGRIS Corner
- Linking Girls to the Land: Working Together to Conserve Natural Resources

Recent Documents, Databases, etc.

Serious Scientists Gather 'Round...

N A T I O N A L N E W S

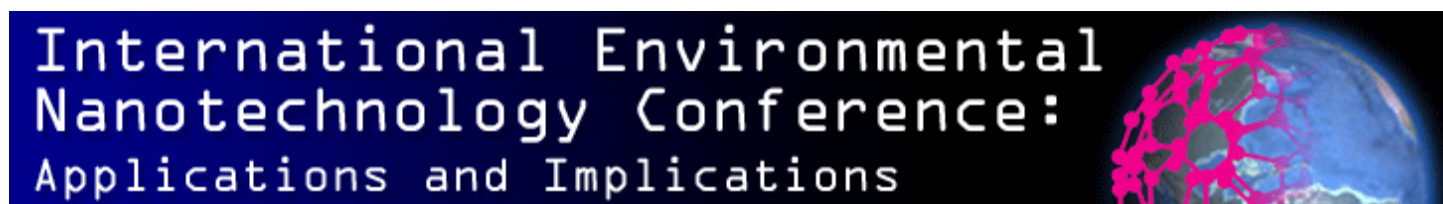
National Forum on Vapor Intrusion: Science, Technology and Policy, Philadelphia, PA
(January 12-13, 2009)



(Photo courtesy of ITRC)

This forum will be structured on dual tracks with common sessions and is geared towards a community stakeholder audience, as well as others. Technical presentations on sampling, assessment, risk, and engineering are being planned, and case studies illustrating a cross section of vapor intrusion issues from the perspective of community stakeholders, Brownfields, EPA, and states will be presented. There will be two breakout sessions: one on community issues and one on government programs. Although all speakers are by invitation only, poster presentations are welcome. For more information on poster presentations and to register, see <http://www.epa.gov/osp/stlworkshops.htm>.

**Summary of International Environmental Nanotechnology Conference:
Applications and Implications Chicago, IL, October 7-9, 2008**



This conference, co-sponsored by EPA's Office of Science Policy in ORD and Region 5, was considered a huge success, as it drew researchers from around the world to give talks on the latest in research and development in the field of nanotechnology as it relates to environmental issues. Led by STL Charles Maurice and Region 5's Warren Layne, and with two other STLs as session co-chairs (Jon Josephs and Michael Gill), this conference drew 185 people from 5 continents. The speakers were from government, NGOs, and private entities and the topics covered environmental applications and implications of nanotechnology. Many agencies played a part in the success of the conference, including NIEHS, DOE, Navy, University of Illinois School of Public Health, NSF, Army, and ATSDR.

Region 5's RA Bharat Mathur kicked off the 2.5 day conference, with ORD AA George Gray and Jeff Morris (EPA's nanotechnology lead) also doing introductory speeches. Then eight keynote speakers, most from outside the US, provided plenary speeches on the topic areas (4 each day).

The sessions were as follows:

- Water / Soil / Sediment Remediation
- Water Pollution Control
- Nano-Enabled Monitoring / Sensing
- Toxicity
- Air Pollution Control
- Fate and Transport

The conference wrapped up with session summaries on the last day. And, not to be forgotten, the food was reported to be "most excellent"! The proceedings will be available around March 2009, but the program and other related materials, including speaker manuscripts and bios are currently available on the following website:

<http://emsus.com/nanotechconf/index.htm> .



New Tools and Technologies

Ecotools Technical Assistance Service

The EcoTools Technical Assistance Service is an exclusive resource for Remedial Project Managers (RPM) at Superfund sites. Through this service, RPMs can connect with experts in the ecological land reuse field and get answers to related questions in a variety of subjects, including:

- Ecological reuse of contaminated sites
- Soil amendments
- Native plants, invasive species, and revegetation

To submit a question, go to <http://www.cluin.org/ecotools/sf.cfm>

Sequestering Carbon Dioxide

(From What's Happening in ORD? , Vol 2, # 2, Summer 08)

<http://intranet.epa.gov/ord/ioaa/whats-happening-ord/index.htm>

Three ORD scientists are leading research efforts to help establish safe guidelines for injecting carbon dioxide (CO2) underground for long-term storage. Stephen Kraemer, Richard Wilkin, and Dominic DiGiulio are each leading projects that will help the Office of Water with its rulemaking for CO2 sequestration.

Dr. Kraemer of the National Exposure Research Laboratory will develop and test semi-analytic models of CO2 sequestration that can evolve into tools for permitting and designing strategies for sampling and monitoring.

Dr. Wilkin of the National Risk Management Research Laboratory will model the fate, transport and geochemical behavior of sequestered CO2, and his results will feed into an examination of mitigation and remediation strategies.

Dr. DiGiulio, also of the National Risk Management Research Laboratory, will research ways to detect CO2 leakage from plugged abandoned wells.

Contacts: Audrey Levine, National Program Director of the Drinking Water Research Program, or Joel Scheraga, National Program Director of the Global Change Research Program.

For more information about OW's rulemaking process, visit:

http://www.epa.gov/safewater/uic/wells_sequestration.html

For more information on the Drinking Water and Global Change Research Programs, visit

<http://epa.gov/ord/npd/>

Sustainable Approaches to Analyzing Chemical Toxicity

(From NRMRL News, September 2008)

Each year many new chemicals join the thousands already in existence in the marketplace. Determining their potential hazard to humans and the environment is an ongoing challenge for EPA's mission of sustainability in support of economic growth. At EPA's National Risk Management Research Laboratory (NRMRL), sustainability scientists are developing new computer tools that estimate the toxicity of the molecular structure of chemicals using Quantitative Structure-Activity/Property Relationships (QSARs). The QSAR techniques yield faster and cheaper results than traditional experimental testing, which is currently being reduced or banned in the United States and European Union. The new QSAR-based Toxicity Estimation Software Tool (T.E.S.T.) will be released in a freely available format this year.

Background

The demand for toxicological testing has grown significantly along with increasing public and governmental concern for the safety of new drugs and industrial chemicals. EPA's New Chemicals Program was established in 2007 to allow the identification and control of new chemical substances. The New Chemicals Program functions as a gatekeeper that can identify conditions, up to and including a ban on production, to be placed on a new chemical before it enters the marketplace. Under this program, manufacturers must provide test data on new chemicals detailing their risk of carcinogenic, mutagenic, acute, and chronic effects on human health. Environmental test data must show acute toxicity to invertebrates and fish, as well as bioaccumulation data (long-term environmental effects.)

In the absence of the manufacturer's own test data, EPA testing procedures use quantitative structure-activity relationship (QSAR) models to predict the toxicity of new industrial chemicals. QSAR models express the correlation between the chemical's physicochemical properties and its toxicity. EPA's ECOSAR (Ecological Structure Activity Relationship) software uses more than 100 QSAR models for 42 different chemical classes to estimate the toxicity of industrial chemicals to aquatic organisms such as fish, invertebrates, and algae. However, because these models are not species-specific, NRMRL sustainability researchers are developing molecular structure software that can be used to estimate toxicity for specific species. For example, the new software tool estimates the concentrations of chemicals in water that will kill half of a specific fish population (i.e., fathead minnows) in a four-day period. The software estimates toxicity directly from molecular structure, and no animal testing is involved.

The new software tool will allow the user to simply input a chemical to be evaluated by drawing it in a sketcher window, entering a SMILES (Daylight Chemical Information System 2006) string or by entering other standardized formats for molecular structures. Once entered, the program calculates the molecular descriptor values and then estimates the toxicity. It is expected that the tool will aid regulatory agencies and industry to assess chemicals for programs such as EPA's New Chemicals Program.

Five validated QSAR methodologies are included in the new T.E.S.T. software tool. They are detailed at the Clean Processes Program's QSAR webpage: (<http://www.epa.gov/nrmrl/std/cppb/qsar/index.html>).

Readers who are interested in a full report and discussion of the QSAR methodologies used in the program research will find information in:

Martin, T.M., P. Harten, R.Venkatapathy, S. Das, and D.M. Young. (2008). "A Hierarchical Clustering Methodology for the Estimation of Toxicity." *Toxicology Mechanisms and Methods*, 18, 2: 251-266.

Contact: Jane Ice, NRMRL Office of Public Affairs (513) 569-7311

LOCAL NEWS

Green Remediation Case Studies

If you've had your ears to the ground at all for the past 6 months, you've definitely heard more and more each day about "Green Remediation" (GR). There are a number of definitions floating out there for GR, but here is the one that EPA's OSWER is using: ***Green remediation is the practice of considering environmental impacts of remediation activities at every stage of the Remedial process in order to maximize the net environmental benefit of a cleanup. Considerations include selection of a remedy, energy requirements, efficiency of on-site activities, and reduction of impacts on surrounding areas.*** In this article, I wanted to provide you with a few "local" (Region 9) GR case studies, and then outline some highlights going on that I've been following both inside and outside EPA.

The local flavor in this article is that there are a number of site activities happening right here in Region 9. The examples highlighted here were summarized from a Region 9 webpage, where these and many others are more fully explained: <http://www.epa.gov/region09/cleanup-clean-air/pilot-prg.html> . (Photos courtesy of this EPA website.)



SOLAR: At the Pemaco site in Maywood, CA, electrical resistive heating was selected as part of the remedy to clean up VOCs in soil and groundwater. To assist with the electricity needs for this energy-intensive remedy, **solar panels** were installed on the top of an on-site building. The photovoltaic system has been generating about 529 kWh / month since its installation in late 2007. This offsets about 3.3 tons of CO₂ per year, which is equivalent to 7,600 car miles.



CLEAN DIESEL: Camp Pendleton Marine Corps Base utilized clean diesel technology to excavate 120,000 cubic yards of contaminated soil as part of the Cleanup-Clean Air Initiative. This project is the result of a partnership between EPA, Navy, Marine Corps, West Coast Environmental (the cleanup contractor), Caterpillar and Huss (equipment suppliers). These efforts are especially important because non-road vehicles account for nearly 30% of all diesel particulate emissions in California, making them the largest single source of these emissions. These emissions are linked to reduced lung capacity and asthma and are likely human carcinogens.



WASTE TO POWER: Located 10 miles east of Los Angeles in Monterey Park, CA, the Operating Industries, Inc. (OII) Landfill Site is divided into two parcels by the Pomona Highway (Highway 60): The North Parcel is owned by A.H.A.S., Inc and contains about 45 acres; the South Parcel is owned by OII and contains about 145 acres. Six microturbines were installed on the North Parcel as part of the landfill gas collection system in 2002, converting landfill gas to electric power. All emissions from the microturbines are collected and returned to the gas treatment system to ensure removal of all contaminants. The microturbines save up to \$400,000 per year, and generate enough power to supply about 70% of the landfill's energy needs. Each microturbine can generate 70 kilowatts per hour, for a total of 420 kilowatts per hour. They operate approximately 70% of the time and provide power for remedial systems and site operation and maintenance.

	<i>Recent Green Remediation Highlights</i>
<u>Guidance</u>	EPA has written and released a number of guidance documents and fact sheets recently. Most of these can be accessed from the clu-in.org website --> http://www.cluin.org/greenremediation/
<u>EPA Workgroups</u>	A number of EPA workgroups have emerged, including the Climate Change and Contaminated Land (CCCL) Workgroup and a subcommittee under the Superfund Engineering Forum. Some are policy related and others are technical, and yes, they are starting to coordinate with each other! An EPA intranet site is being created to describe goals, membership and other info about these groups and will be posted soon. For more information, please contact Carlos Pachon at pachon.carlos@epa.gov .
<u>Non-EPA Workgroups</u>	<ul style="list-style-type: none"> - CalEPA has started a "Green Team" and is planning a related symposium for early 2009. - The Army Corps of Engineers has an MOU with EPA to promote green cleanup at DoD remediation sites. - NASA is interested in reducing the energy costs of their long term ground water remedies and has created a "<i>Technology Evaluation for Environmental Risk Mitigation (TEERM) Principal Center</i>" and hopes to collaborate with EPA on this work. See more here: http://acqp2.nasa.gov/overview.html . - The ITRC is considering a new team called the "Green and Sustainable Remediation" Team (GSR) to start up in 2009. See page 3 of this publication: http://www.itrcweb.org/Documents/News/qu_sept_08.pdf . - Industry (under Dupont) has created a "Sustainable Remediation Forum" (SuRF) that has been active for almost two years.
<u>Renewable Energy Maps</u>	EPA has created a tool using data from Google Earth and the National Renewable Energy Lab to combine land that needs revitalization (Superfund, Brownfields sites) with areas of the country offering the best potential for renewable energy production. See this website: http://www.epa.gov/oswer/ocpa/maps_incentives.htm .
<u>GR Tech Support</u>	EPA is offering online general and site specific tech assistance on green remediation issues! See here for more: http://www.cluin.org/greenremediation/tab_f.cfm .
<u>GR Online Seminars</u>	EPA's Engineering Forum has scheduled a three-part online seminar series on various aspects of green remediation in the coming months. The first one is set for November 24th . The seminar series offers another chance to see some of those presentations offered at the annual "NARPM" conference in July (Portland). For more information, see this webpage: http://clu-in.org/live/#Green_Remediation:_Opening_the_Door_to_Field_Use_Session_A_(Introduction_and_Carbon_Calculus:_A_RCRA_Case_Study)_20081124 .

DATEBOOK - UPCOMING EVENTS

This section of the newsletter is an attempt to present both EPA and non-EPA sponsored environmental technology related courses and conferences. But being a quarterly publication, it is impossible for this newsletter to always be up-to-date. For the most pertinent information on upcoming EPA courses, see <http://www.trainex.org>. These events are listed chronologically.

Many of the entries in these newsletters are from TIO's "TechDirect" emails (thank you Jeff Heimerman!). TechDirect is also tied to the clu-in webpage, which lists many training opportunities, including the following:

Announcement of Courses:	http://clu-in.org/courses
Archive of Courses:	http://clu-in.org/live/archive.cfm
Internet Training	http://www.cluin.org/training

Internet Based Training (many are ITRC)

These are typically 1-2 hour online courses where the participant follows a webpage presentation, while listening on the phone. Check - <http://www.itrcweb.org> or <http://www.clu-in.org/studio/seminar.cfm> to verify times and registration, unless other websites are mentioned below.

October 28 - Real-Time Measurement of Radionuclides in Soil
2:00 p.m.-4:15 p.m. EASTERN TIME

November 6 - Enhanced Attenuation of Chlorinated Organics: A Site Management Tool
11:00 a.m.-1:15 p.m. EASTERN TIME

November 13 - In Situ Bioremediation of Chlorinated Ethene - DNAPL Source Zones
11:00 a.m.-1:15 p.m. EASTERN TIME

November 18 - Decontamination and Decommissioning of Radiologically-Contaminated Facilities
2:00 p.m.-4:15 p.m. EASTERN TIME

November 20 - Planning and Promoting of Ecological Land Reuse of Remediated Sites
11:00 a.m.-1:15 p.m. EASTERN TIME

November 24 - Green Remediation: Opening the Door to Field Use - Session A (Introduction and Carbon Calculus: A RCRA Case Study)
1:00pm-3:00pm EASTERN TIME

Emergency Preparedness and Prevention and Hazmat Spills Conference

October 26-29, 2008

Richmond, VA

<http://2005conference.org/>

2008 International Water Conference

October 26-30, 2008

San Antonio, TX

<http://www.eswp.com/water/>

11th Annual Florida Brownfields Conference

October 26-29, 2008

St. Pete Beach, FL

<http://www.floridabrownfields.org>

"Green Chemistry: The Environment, Sustainability and the Future of Chemicals Science and Policy in California"

October 28, 2008

University of California, Berkeley School of Public Health, Berkeley, CA

<http://bie.berkeley.edu/norcalsetac/>

Petroleum Hydrocarbons and Organic Chemicals in Ground Water: Prevention, Detection, and Remediation® Conference

November 3-4, 2008

Houston, TX

<http://www.ngwa.org/DEVELOPMENT/conferences/details/0811035040.aspx>

Innovative Remediation Technology Conference

November 6-7, 2008

Denver, Colorado

<http://www.aipg.org/Seminars/program.htm>

Sustainable Property Transactions-Deal Making and Redevelopment of Contaminated Sites

November 12-14, 2008

San Francisco, CA

<http://www.rtmcomm.com/rtmcomm/conferences.php>

AWWA 2008 Water Quality Technology Conference and Exposition (WQTC)

November 16-20, 2008

Cincinnati, OH

<http://www.awwa.org/Conferences/>

SETAC North America: 29th Annual Meeting

November 16-20, 2008

Tampa, FL

<http://www.setac.org/tampa/>

Emerging Contaminants 2008 (Groundwater Resources Association of California)

November 19-20, 2008

San Jose, California

<http://www.grac.org/contaminants.asp>

SERDP AND ESTCP ANNUAL TECHNICAL SYMPOSIUM & WORKSHOP

December 2-4, 2008

Washington, D.C.

<http://www.serd-estcp.org/Symposium>

Removal Process

December 2-5, 2008

Arlington, VA

<http://www.trainex.org/offeringslist.cfm?courseid=45&all=yes>

Remedial Process

December 2-5, 2008

Arlington, VA

<http://www.trainex.org/offeringslist.cfm?courseid=52&all=yes>

Monitored Natural Attenuation of Petroleum and Chlorinated Hydrocarbons in Soil and Groundwater

December 2-3, 2008

Phoenix, AZ

http://www.nwetc.org/ghyd-410_12-08_phoenix.htm

SBRP Annual Meeting

December 7-9, 2008

Asilomar Conference Grounds in Pacific Grove, CA

<http://conferences.ucdavis.edu/Cofred/Public/Aca/ConfHome.cfm?confid=385>

NATIONAL COUNCIL FOR SCIENCE AND THE ENVIRONMENT

9th National Conf on Science, Policy and the Environment: *Biodiversity in a Rapidly Changing World*

December 8-10, 2008

Washington, DC.

<http://ncseonline.org/Conference/Biodiversity/>

Collaborative Approaches to Integrated Modeling: Better Integration for Better Decision Making

(At the OEI Environmental Information Symposium 2008)

December 10-12, 2008

Phoenix, AZ

To register for the workshop: <http://www.epa.gov/crem/integrated-modeling-workshop2008.html>

Please also register to attend the OEI Symposium: <http://www.epa.gov/oei/symposium/2008/index.htm>

Radiation Safety - Overview for Environmental Professionals - Day 1

January 6, 2009

TBD, EPA Region 9

<http://www.trainex.org/offeringlist.cfm?courseid=182&all=yes>

Radiation Safety - Practical Applications - Day 2

January 7, 2009

TBD, EPA Region 9

<http://www.trainex.org/offeringlist.cfm?courseid=183&all=yes>

Radiation Safety - Advanced For Environmental Professionals - Day 3

January 8, 2009

TBD, EPA Region 9

<http://www.trainex.org/offeringlist.cfm?courseid=184&all=yes>

National Forum on Vapor Intrusion: Science, Technology and Policy

January 12-13, 2009

Philadelphia, PA

<http://www.epa.gov/osp/stlworkshops.htm>

US EPA Tech Support Project Meeting

January 26-30, 2009

San Diego, CA

For more info, contact Linda Fiedler at <fiedler.linda@epa.gov> or check:

<http://www.epa.gov/tio/tsp/meetings.htm>

Cal EPA Green Remediation Symposium

February 4-5, 2009 (Tentative)

Sacramento, CA

Contact Mikos Fabersunne (MFabersu@dtsc.ca.gov) for more information.

Translating SBRP Triumphs into Public Health Progress: Understanding and Implementing Effective Research Translation

February 11-13, 2009

Lamont-Doherty Earth Observatory, Columbia University, Palisades, NY

<http://www.niehs.nih.gov/research/supported/sbrp/events/index.cfm>

**Groundwater Monitoring Design, Analysis, Communication & Integration with Decision Making
(Sponsored by the Groundwater Resources Association of California)**

February 25-26, 2009

Orange, CA

<http://www.grac.org/monitoring.asp>

REMTEC

March 3-5, 2009

Atlanta, GA

<http://www.RemTEC09.com>

19th Annual AEHS Meeting & West Coast Conference on Soils, Sediments, and Water

March 9-12, 2009

San Diego, California

<http://www.aehs.com/conferences/westcoast/index.htm>

The 24th International Conference on Solid Waste Technology and Management

March 15 - 18, 2009

Philadelphia, PA

<http://www.widener.edu/solid.waste>

2009 Conference on Design and Construction Issues at Hazardous Waste Sites

April 13-15, 2009

Loews Philadelphia Hotel, Philadelphia, PA

<http://superfund.usace.army.mil/2009DCHWS> (after January 5, 2009)

Sampling for Hazardous Materials

April 14-16, 2009

TBD, EPA Region 8

<http://www.trainex.org/offeringlist.cfm?courseid=20&all=yes>

In Situ and On-Site Bioremediation - The 10th International Symposium

May 5-8, 2009

Baltimore, MD

<http://www.battelle.org/conferences/bioremediation/>

Hazardous Materials Incident Response Operations

May 18-22, 2009

Los Angeles, CA

<http://www.trainex.org/classdetails.cfm?courseid=23&classid=3809>

11th International Congress on Combustion By-Products and Their Health Impacts

Date: June 2009

Location: Research Triangle Park, NC

<http://www.niehs.nih.gov/research/supported/sbrp/events/index.cfm>

Micropol and Ecohazard 2009 - 6th IWA/GRA Specialized Conference on Assessment and Control of Micropollutants/Hazardous Substances in Water

June 8-10, 2009

San Francisco, CA

<http://www.grac.org/micropol.asp>

SWANA's 14th Annual Landfill Symposium

June 1-5, 2009

Savannah, GA

<http://lfswm.swana.org/>

International Conference on the Environmental Implications and Applications of Nanotechnology

June 9-11, 2009

University of Massachusetts, Amherst

<http://www.umass.edu/tei/conferences/NanoConference/index.html>

The Air & Waste Management Association's 101st Annual Conference & Exhibition (ACE)

June 16-19, 2009

Detroit, MI

<http://www.awma.org/ACE2009/index.html?src=mailing080908>

Munitions Response and Operational Range Sustainability Conference

July 19-22, 2010

Reno, NV

<http://www.battelle.org/conferences/range/>

W E B P A G E S

EUGRIS Corner

The following reports have recently been featured on EUGRIS.

<http://www.eugris.info/whatsnew.asp>

CL:AIRE (2008) Technology Demonstration Project Bulletin 26 (TDP 26 Bulletin): In Situ Soil and Groundwater Decontamination Using Electric Resistive Heating Technology (Six-Phase Heating)

http://www.claire.co.uk/index.php?option=com_docman&task=cat_view&gid=930&Itemid=25

CL:AIRE (2008) SUBR:IM Bulletin 10 (SUB 10): The Use of Compost in the Regeneration of Brownfield Land

[www.frcc.forestry.gov.uk/pdf/SUBRIM_bulletin_10.pdf/\\$FILE/SUBRIM_bulletin_10.pdf](http://www.frcc.forestry.gov.uk/pdf/SUBRIM_bulletin_10.pdf/$FILE/SUBRIM_bulletin_10.pdf)

Guidance on the Legal Definition of Contaminated Land (2008) Department for the Environment, Food and Rural Affairs.

<http://www.defra.gov.uk/environment/land/contaminated/pdf/legal-definition.pdf>

Pesticide Residues MRLs (2008). http://ec.europa.eu/sanco_pesticides/public/index.cfm .

Linking Girls to the Land: Working Together to Conserve Natural Resources

The "Linking Girls to the Land" initiative gives Girl Scouts a deeper personal connection with the outdoors and the environment in an increasingly urbanized society. When girls gain outdoor experiences in conservation education, they build the foundation for important life skills, a lifetime appreciation for nature, and the start of potential careers in natural resource conservation. View or download the 11-minute video at http://www.clu-in.org/studio/linking_girls_full.cfm .

RECENT DOCUMENTS, DATABASES, ETC.

These entries are arranged alphabetically. Thanks to TechDirect, Tech Trends, NRMRL News, the ETV Program, DOE, DoD and others for posting their latest documents. And remember, many of these are available in paper format in the Region 9 library. Use your local library.....or it may disappear. It's happened at EPA, although the powers that be have seen the light. Now we all hope that those impacted libraries can recover.

Approach to Vapor Intrusion at Contaminated Dry Cleaner Sites: A Survey of Member States
(August 2008, 10 pages)

http://www.drycleancoalition.org/download/SCRD_VI_2008.pdf

Arsenic Removal from Drinking Water by Adsorptive Media, U.S. EPA Demonstration Project at Dummerston, VT, Final Performance Evaluation Report

(76 pp, 1.97 MB)
(EPA/600/R-08/081)

July 2008

<http://www.epa.gov/nrmrl/pubs/600r08081/600r08081.html>

Attenuated Anaerobic Dechlorination of Groundwater Using HRC

MACTEC - Harding ESE: Demonstration Bulletin

(2 pp, 120 KB)

(EPA/540/R-08/003)

August 2008

<http://www.epa.gov/nrmrl/pubs/540r08003/540r08003.pdf>

Demonstration and Evaluation of an Automated Infiltration Gallery System at Port Hueneme, CA

(109 pp, 4.45 MB)

(EPA/600/R-08/068)

June 2008

<http://www.epa.gov/nrmrl/pubs/600r08068/600r08068.pdf>

Demonstrations of Method Applicability under a Triad Approach for Site Assessment and Cleanup - Technology Bulletin

http://www.brownfieldstsc.org/pdfs/Demonstrations_of_Methods_Applicability.pdf

Development of Duration-Curve Based Methods for Qualifying Variability and Change in Watershed Hydrology and Water Quality

(58 pp, 2.63 MB)

(EPA/600/R-08/065)

May 2008

<http://www.epa.gov/nrmrl/pubs/600r08065/600r08065.pdf>

Development of EPA OTM 10 for Landfill Applications

Thoma, E. D., S. Thorneloe, R. Segall, R. B. Green, G. R. Hater, R. Hashmonay, M. Modrak, M. J. Chase, AND D. C. Goldsmith

Interim Report. In Proceedings, AWMA's 101st Annual Conference and Exhibition, Portland, OR, June 24-27, 2008. AWMA Pittsburgh, PA, NA, (2008)

<http://www.awma.org/ACE2008/>

Environmental Technology Verification (ETV) test of dioxin emission monitors

Lee, C., D.G. Tabor and K. A. Cowen. (2008).

Journal of Material Cycles and Waste Management, 10, 1: 38-45.

<http://springerlink.com/content/110360/>

Green Synthesis of Silver and Palladium Nanoparticles at Room Temperature Using Coffee and Tea Extract

Nadagouda, M.N. and R.S. Varma. (2008)

Green Chemistry, 10, 8:859-862.

<http://www.rsc.org/Publishing/Journals/GC/article.asp?doi=b804703k>

Hazardous Waste Clean-Up Information (CLU-IN) On-line Remediation Databases Fact Sheet
(EPA 542-F-06-006)

http://www.clu-in.org/download/remed/Online_Remediation_Factsheet.pdf

View, search, and submit projects at <http://clu-in.org/databases/> .

Highlights of the Technical Support Project Meeting, Portland, OR, July 7-11, 2008

http://www.epa.gov/tio/tsp/download/2008_spring_meeting/highlights_tsp_2008_narpm.pdf

In Situ Bioremediation of Chlorinated Ethene: DNAPL Source Zones (BioDNAPL-3)

(June 2008, 138 pages)

http://www.itrcweb.org/Documents/bioDNPL_Docs/BioDNAPL3.pdf

In Situ Source Treatment of Cr(VI) Using a Fe(II)-Based Reductant Blend: Long-Term Monitoring and Evaluation

Ludwig, R.D., C. Su, T.R. Lee, R.T. Wilkin and B.M. Sass. (2008)

Journal Of Environmental Engineering, 134, 8:651-659.

<http://cedb.asce.org/cgi/WWWdisplay.cgi?0807237>

Linking Waterfowl with Contaminant Speciation in Riparian Soils

(82 pp, 1.93 MB)

(EPA/600/R-08/060)

January 2008

<http://www.epa.gov/nrmrl/pubs/600r08060/600r08060.pdf>

New Cost and Performance Information on Cleanup Technologies, Annual Summary of Activities: August 2008

(EPA 542-F-08-005)

(August 2008, 6 pages)

<http://www.frtr.gov/pdf/epa542f08005.pdf>

Proven Technologies and Remedies Guidance – Remediation of Metals in Soil

http://www.dtsc.ca.gov/PublicationsForms/upload/Guidance_Remediation-Soils.pdf

Quick Assessment Protocols for Measuring Relative Ecological Significance of Terrestrial Ecosystem

(46 pp, 3.47 MB)

(EPA/600/R-08/061)

May 2008

<http://www.epa.gov/nrmrl/pubs/600r08061/600r08061.pdf>

Technology News and Trends

(EPA 542-N-08-004)

(July 2008, 6 pages)

<http://www.clu-in.org/download/newsletters/tnandt0708.pdf>

Technology News and Trends

(EPA 542-N-08-005)

(October 2008, 6 pages)

<http://www.clu-in.org/download/newsletters/tnandt1008.pdf>

User's Guide to the Collection and Analysis of Tree Cores to Assess the Distribution of Subsurface Volatile Organic Compounds

(July 2008, 72 pages)

<http://pubs.usgs.gov/sir/2008/5088/>

Serious Scientists Gather 'Round. . .

Continuing on the controversial themes of the past few newsletters.....
This will end soon, right??

TI: EPA ordered to reopen libraries

AU:

JN: Environmental Science and Technology

PD: 2008

VO: 42

NO: 5

PG: 1392

PB: ACS AMERICAN CHEMICAL SOCIETY

IS: 0013-936X

PE: MAR 01

URL: <http://www.ingentaconnect.com/content/docdel/art1081390266>

TI: What Lies Beneath: A Plea for Complete Information

AU: Brewer, PG; Nakayama, N

JN: Environmental Science and Technology

PD: 2008

VO: 42

NO: 5

PG: 1394

PB: ACS AMERICAN CHEMICAL SOCIETY

IS: 0013-936X

PE: MAR 01

URL: <http://www.ingentaconnect.com/content/docdel/art1081390272>

TI: OMB should rethink research evaluation tool

AU:

JN: Environmental Science and Technology

PD: 2008

VO: 42

NO: 8

PG: 2715

PB: ACS AMERICAN CHEMICAL SOCIETY

IS: 0013-936X

PE: APR 15

URL: <http://www.ingentaconnect.com/content/docdel/art1082076356>

TI: EPA toxicity risk assessments in crisis: Political interference and lack of transparency taint science and delay assessments

AU:

JN: Environmental Science and Technology

PD: 2008

VO: 42

NO: 13

PG: 4620

PB: ACS AMERICAN CHEMICAL SOCIETY

IS: 0013-936X

PE: JUL 01

URL: <http://www.ingentaconnect.com/content/docdel/art1083079815>



Disclaimer

This quarterly newsletter publication is meant to be used for information only. It does not represent the opinion of the management of the regional or national offices of EPA, only that of the author. The accuracy of the information contained herein is not guaranteed, only desired. If corrections are necessary, please contact the author. Thanks again to all of my information resources, which include EPA's OSRTI (formerly TIO), ORD (including ETV and NRMRL News) and Region 1's CEIT.

Thanks for reading it! Comments and suggestions are appreciated. If you wish to be added to or deleted from this list, please send me an email. (gill.michael@epa.gov)

Newsletter archives can be found on the EPA intranet site.....<http://www.epa.gov/osp/hstl/hstlnewsletter.htm>

A number of environmental technology web resources can be found here.....<http://www.epa.gov/region09/waste/techlinks/>

And don't forget the "STL" website.....<http://www.epa.gov/osp/hstl.htm>

Mike Gill
ORD Superfund and Technology Liaison
US EPA Region 9 / SFD-84
75 Hawthorne Street
San Francisco, CA 94105
415-972-3054
415-947-3520 (Fax)
Gill.Michael@epa.gov
